

WHAT IS CLAIMED IS

1. A method for depositing an electrically conductive layer of precious metal on a face of a metal substrate by maintaining a mask closely over the substrate face while the face and mask are immersed in an electrolyte and the precious metal is electrodeposited through the electrolyte onto the substrate face, comprising:

maintaining a screen closely between said mask and said substrate face, said screen having a regular pattern of through holes, and including flowing the electrolyte into said through hole and against the substrate face, and electrodepositing the precious metal through the electrolyte lying in said holes onto the substrate face.

2. The method described in claim 1 wherein:

said screen is formed of multiple wires that each have a rounded periphery.

3. The method described in claim 1 wherein:

said step of electroplating includes depositing said precious metal to an average thickness of less than 5 microns.

4. The method described in claim 1 wherein:

said screen is woven of threads of round cross-section, that form multiple primarily square openings that each have a width and length on the order of 85 microns.

5. The method described in claim 1 wherein:

said mask is of elastomeric material, and including compressing said

screen between said mask and said substrate face, and maintaining locations on said screen that lie in openings of said mask against said substrate face.

6. Apparatus for the deposition of an electrically conductive layer of precious metal on the face of a metal substrate through an opening in a mask, by the electrodeposition of the precious metal through an electrolyte onto the face of the substrate, comprising:

5 a screen that lies at least in said mask opening, against the face of the metal substrate, said screen having a regular pattern of through holes in which the electrolyte can lie, to produce a deposited layer having multiple recesses.

7. The apparatus described in claim 6 wherein:  
said screen is formed of woven threads of electrically nonconductive material, said threads having rounded outside surfaces.

8. The apparatus described in claim 6 wherein:  
said screen is formed of woven threads of electrically nonconductive material which form primarily square openings that each has a length and width or the order of 85 microns.

9. A sheet of electrically conductive material wherein:  
said sheet is formed of electrolytically deposited precious metal and has an upper face that has multiple depressions in the form of a mesh, with said depressions spaced apart at a pitch on the order of 85 microns.

10. The sheet described in claim 9 wherein:  
said upper face forms peaks that are substantially coplanar.

11. The sheet described in claim 9 wherein:  
the maximum thickness of said sheet is between 0.2 and 2 microns.